Light hydrocarbons, \( C_1 \) – \( C_8 \)

Analysis of natural gas on a wide-bore column

Application Note

Energy & Fuels

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Introduction
Gas chromatography using an Agilent CP-\( \text{Al}_2\text{O}_3 \)/KCl column separates ten \( C_1 \) to \( C_{10} \) light hydrocarbons in natural gas in 20 minutes.
Conditions

Technique: GC-capillary

Column: Agilent CP-$\text{Al}_2\text{O}_3$/KCl, 0.53 mm x 50 m fused silica
$\text{Al}_2\text{O}_3$/KCl PLOT (Part no. CP7518)

Temperature: 30 °C → 200 °C, 10 °C/min

Carrier Gas: H$_2$, 50 kPa (0.5 bar)

Injector: Direct Injector

Detector: FID

Peak identification

1. methane
2. ethane
3. propane
4. C$_4$
5. C$_5$
6. C$_6$
7. C$_7$
8. benzene
9. C$_8$
10. toluene

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